## Precalculus with Limits: A Graphing Approach, Pupil Edition

The program is intended for a slightly accelerated course, particularly for those students who plan to take AP Calculus in high school and/or to pursue further study of mathematics in college. The program provides students with carefully structured explanations of key concepts, supported by abundant examples with step-by-step solutions. Examples and exercises emphasize the effective use of graphing calculators and other technology.

Teacher Edition			
9780618851539			
Precalculus with Limits: A Graphing Approach, Teacher Edition			
Essential Items			
Ancillary Items			
Free with Purchase items			
9780547073293 Precalculus with Limits: A Graphing Approach ExamView Test	\$177.63		
Upon request, one per teacher, year of purchase.			
9780618851867 Precalculus with Limits: A Graphing Approach DVD Program	\$29.97		
Upon request, one per teacher, year of purchase.			
9780618851874 Precalculus with Limits: A Graphing Approach Student Solutions	\$31.47		
Upon request, one per student edition purchased, Initial year of purchase.			
9780618854448 Precalculus with Limits: A Graphing Approach Note-Taking Guide	\$5.37		
Upon request, one per student edition purchased, Initial year of purchase.			
9780618854455 Precalculus with Limits: A Graphing Approach Test Item File	\$8.97		
Upon request, one per teacher, year of purchase.			
9780618854479 Precalculus with Limits: A Graphing Approach Complete Solutions	\$27.57		
Upon request, one per teacher, year of purchase.			
9780618854486 Precalculus with Limits: A Graphing Approach HM MathSpace CD-	\$5.37		
Upon request, one per student edition purchased, Initial year of purchase.			
9780618854493 Precalculus with Limits: A Graphing Approach HM Testing CD-ROM	\$99.87		
Upon request, one per teacher, year of purchase.			
9780618936441 Precalculus with Limits: A Graphing Approach Power Presentations:	\$10.17		
Upon request, one per teacher, year of purchase.			

# <u>ISBN</u> **9780618851522**

Contract Price \$113.07

> <u>Grade</u> 11,12

TYPE P1

Copyright 2008

<u>Author</u> Larson, et al.

> Edition 5th

<u>Content</u> PreCalculus

Readability
10.5 Dale Chall Score

Accessibility

Research

Nimas MathML

Contact sales representative for assistance

er	ISBN 9780618851522		Publisher - Holt McDougal, A Division of Houghton Mifflin Harcourt Publishing Company		Pr	
Publisher	Precalculus with Limits: A Graphing Approach, Pupil Edition				ovided	
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ded by	Copyright - $2008$	Edition -	5th	Readability -	10.5 Dale Chall Score	e Pub
Provided	Course - PreCalculus			Grade(s) -	11,12	lisher
	Teacher Edition ISBN if applicable					

## **Overall Recommendation:**

## Recommended as BASAL

**Overall Strengths, Weaknesses, Comments:** 

if this box is not checked, the evaluators have chosen NOT recommend as basal

This text is very readable by students and emphasizes the use of a graphing calculator throughout.

NIMAC Accessibility NML Ancillary Yes Free with Purchase Yes

Research Yes Contact sales representative for assistance

The program is intended for a slightly accelerated course, particularly for those students who plan to take AP Calculus in high school and/or to pursue further study of mathematics in college. The program provides students with carefully structured explanations of key concepts, supported by abundant examples with step-by-step solutions. Examples and exercises emphasize the effective use of graphing calculators and other technology.

#### **CRITERIA**

This basal resource ...

# A. Encompasses KY Content Standards & Grade Level Expectations Strong Evidence

Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 5 Big Ideas of mathematics to the following extent:				
a) Number Properties and Operations	Strong Evidence			
b) Measurement	Little or No Evidence			
c) Geometry	Moderate Evidence			
d) Data Analysis and Probability	Little or No Evidence			
e) Algebraic Thinking	Strong Evidence			
2) Addresses content-specific enduring understandings from the related Program of Studies standards.	Strong Evidence			
3) Addresses content-specific skills and concepts from the related Program of Studies standards.	Strong Evidence			

4) Content addressed is current, relevant and non-trivial	Moderate Evidence
5) Provides opportunities for critical thinking/reasoning	Strong Evidence

# 6) Strengths, Weaknesses, Comments:

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

Click here to enter text.

# **B.** Functionality & Suitability

# **Strong Evidence**

# 1) Suitability

# **Strong Evidence**

• Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

# 2) Content quality

#### **Strong Evidence**

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community
- Interconnections among mathematical topics

# 3) Connections to Literacy

# **Strong Evidence**

- Employs a variety of reading levels and is grade/level appropriate
- Use of multiple representations-concrete, visual/spatial, graphs, charts, etc.
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- The text is engaging and facilitates learning
- Embedded activities enhance the understanding of the text *Note: may apply to either student or teacher editions*

## 4) Connections to Technology

# **Strong Evidence**

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data
- Embeds web links as a mathematics resource.

## 5) Support for Diverse Learners

# **Strong Evidence**

- Provides support for ESL students
- Provides support for differentiation of instruction in diverse classrooms
- Challenge for gifted and talented students

• Support for students with learning difficulties Note: may apply to either student or teacher editions

# 6) Strengths, Weaknesses, Comments:

• Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The teacher text has suggestions for differentiating instruction for different learning styles, ESL students, and students having difficulties. Because of the text's focus on the use of the graphing calculator diagram of graphs are actual screen captures from the calculator.

## C. Supports Inquiry and Skill Development

**Strong Evidence** 

# 1) Promotes Inquiry, research and Application of Learning

Strong Evidence

- Provides opportunities for inquiry and research that includes activities such as gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions, formulating authentic questions to deepen and extend mathematical reasoning.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, generalizing, justifying, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, number lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

*Note:* may apply to either teacher or student edition

## 2) Skill Development

Strong Evidence

- Provides opportunities to make sense of all mathematics
- Provides opportunities to recognize, create, and extend patterns.
- Provides opportunities for critical thinking and reasoning.
- Provides opportunities to justify/prove responses.
- Provides opportunities to ask deeper questions.
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

*Note:* may apply to either teacher or student edition

#### 3) Strengths, Weaknesses, Comments:

Click here to enter text.

## D. Supports Best Practices of Teaching and Learning

**Strong Evidence** 

# 1) Engages Students

Moderate Evidence

- Includes content geared to the needs, interests, and abilities of all students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated *Note: may apply to either teacher or student edition*

# 2) Uses Assessment to Inform Instruction

Strong Evidence

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels *Note: may apply to either teacher or student edition*

#### 3) Strengths, Weaknesses, Comments:

 Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

Teacher text includes references to "daily homework quizzes" for more formative assessment.

# E. Has an Organization/ Format that Supports Learning and Teaching

**Strong Evidence** 

# 1) Organizational Quality

## Strong Evidence

- Print and/or electronic materials present minimal barriers to learners, but also add encouragement for students to stretch and make further explorations.
- Presents chapters/lessons in an organized and logical sequence
- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer software, web-based components, interactive software, calculators, physical and virtual manipulatives) as either student or teacher resources
- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
- Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
- Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

# 2) Essential Components (beyond student and teacher text)

Little or No Evidence

• Items identified as essential components support the learning goals and concept coverage of the basal

# **3)** Strengths, Weaknesses, Comments:

• Reviewers may provide page numbers to point out specific strong examples for individual

evaluation standards.

Teacher and student texts note both what the objectives are and why students should know them. At the end of selected sections texts include a "Progressive Summary Chart" outlining topics covered to that point. In working with systems of equations the text shows parallel solutions for students to see the connections between solving algebraically and solving graphically.

#### F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F

**Strong Evidence** 

#### 1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving
- Provides opportunities for intervention.

# 2) Strengths, Weaknesses, Comments:

 Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Free with order includes a student "Notetaking Guide" to help facilitate notes in class as well as several other resources.